

## **Nebraska Information Technology Commission Strategic Initiatives**

### **Strategic Plan**

## **Community IT Planning and Development**

### **Objective**

As one strategy to remain competitive in the global economy, Nebraska communities can use information technology to enhance economic development opportunities and quality of life. Nebraska businesses can utilize information technology to expand markets, reduce costs, and improve efficiency.

### **Benefits**

Information technology is transforming the economy and society, creating a completely new paradigm. Businesses are using telecommunications to speed up transactions, reduce costs, and expand their markets. Consumers are buying books, CDs, food, gifts, and clothing online. Families are exchanging photos via e-mail. Students at all levels are taking courses via distance learning technologies. Telemedicine is making mental health services and other specialist services available in remote, underserved areas of the state.

A coordinated effort to address the need for information technology training and development for citizens, businesses, communities, and local governments is needed to help Nebraska meet the challenges of the Information Age. These challenges include:

**Encouraging the adoption of technology by citizens.** According to a number of indicators and polls, however, Nebraskans are slower to adopt technology than the U.S. as a whole. In September 2001, approximately 45% of Nebraska households were online. In comparison, approximately 50% of U.S. households were online. Nearly half (49%) of Nebraska households with children (ages 3-17) had Internet access at home, ranking Nebraska 31 out of the 50 states in 2001.

Rural areas have historically lagged behind urban and suburban areas in Internet use. A study by the Pew Internet & American Life Project found that only 52% of rural residents use the Internet, compared to 67% of urban residents, and 66% of suburban residents. The difference in Internet use among urban areas can be in part explained by the demographic make-up of rural areas. Rural areas have a higher proportion of older,

less wealthy, and less educated residents than urban and suburban areas. These groups are less likely to be online.

Although Internet use by African Americans and Hispanics is increasing, both African Americans and Hispanics are also less likely to use the Internet than whites. English-speaking Asian-Americans are the most likely to use the Internet.

Women and girls are as likely to use the Internet as men and boys, but are less likely to take advanced computer classes in high school and to major in computer science or engineering in college. The Nebraska Girls and Technology Status Report sponsored by the American Association of University Women (AAUW) of Nebraska in collaboration with the Nebraska Commission on the Status of Women found that although girls and boys enroll in computer introduction and application courses in equal numbers, boys outnumber girls by more than 3 to 1 in most of the more technology-oriented courses: computer languages, computer science and computer-aided drafting. Girls are even outnumbered by more than 2 to 1 in web design and development courses.

**Accelerating the deployment of advanced services.** In 2003, 86% of the state's population had access to broadband either through cable modem, DSL, or fixed wireless broadband services. These services typically provide speeds of one to two megabits per second. In four to five years, some experts estimate that broadband with speeds of 25 to 40 megabits per second will be needed. In the future, mobile wireless data networks and Voice Over IP services will become increasingly important.

**Providing public access to computers and the Internet.** Most libraries in Nebraska provide public access to computers and the Internet. However, in some communities access is restricted by the number of computers available and by limited library hours.

**Using technology to provide government and community services.** Local governments can use technology to more efficiently and effectively deliver community services.

**Expanding educational opportunities.** Distance learning technologies are expanding educational opportunities at all levels.

**Improving access to health care through information technology.** Through telehealth technologies, residents of rural areas can have better access to mental health and other specialist services. Home telehealth is one of the fastest growing applications of telemedicine, but is not yet widely used in Nebraska.

**Incorporating technology-related development in to local development plans.** While Nebraska's larger communities are using information technology to enhance economic development opportunities, many of Nebraska's smaller communities are just beginning to realize the importance of information technology to their economic viability.

## Current Status

Community information technology development is currently addressed by several organizations including the University of Nebraska, Nebraska Information Technology Commission, the Center for Rural Affairs' REAP program, the AIM Institute, and the Nebraska Department of Economic development. Some of these efforts are loosely coordinated under the umbrella of Technologies Across Nebraska, a partnership of over 40 organizations led by the University of Nebraska and the Nebraska Information Technology Commission.

- Technologies Across Nebraska, a partnership of over 40 organizations led by the University of Nebraska and the Nebraska Information Technology Commission, has worked with 15 communities or regional groups over the past two years to develop technology plans. The impact of the IT Planning and Mini Grant program has been significant. Two communities received federal grants totaling over \$400,000 to implement their plans. A new business has started in a third community. Several communities now have broadband services available. Other communities are focusing on the technology needs of small businesses, offering e-commerce and technology training. One community has developed a video conferencing center available to local businesses and residents. Efforts are made to connect participating communities with resources offered by Technologies Across Nebraska Partners, including the University of Nebraska Rural Initiative's internship program. Technologies Across Nebraska will expand the program to six additional communities this year.
- Technologies Across Nebraska has developed nationally recognized resources to help communities effectively use technology to enhance economic development, including the Community IT Planning workbook and the Community IT Toolkit. Technologies Across Nebraska's quarterly newsletter, *TANGents*, reaches 1,500 individuals.
- The University of Nebraska Rural Initiative has partnered with Congressman Osborne's office and the J. D. Edwards program to place interns in rural communities. Now in its second year, the program placed 12 interns in rural communities last summer. Many of the interns are helping local businesses and organizations effectively utilize information technology.
- Several entities currently offer e-commerce training. The University of Nebraska's Communities of the Future Team offers e-commerce training in communities. Community colleges and the Center for Rural Affairs' Reap program also offer e-commerce training. Through a federal grant, the AIM Institute is working with businesses in Fremont, Norfolk, and Columbus to develop or enhance Web sites. The Department of Economic Development has begun providing e-commerce training upon request to communities which have participated in the Business Expansion and Retention program. The Department of Economic Development's new Interasset program promises to provide technical assistance to rural businesses form strategic and growth objectives highlighting technology and international business relationships. The University of Nebraska Rural Initiative, Nebraska Rural Development Commission, and the Nebraska Information Technology Commission

are working together to promote and coordinate e-commerce training across the state.

- University of Nebraska's Communities of the Future Team offers e-government training in communities. The e-government program provides Internet training to local government officials and helps them understand how e-government can be used to more efficiently and effectively provide services and information to citizens.
- Through funding from the Secretary of State, Nebraska Online is assisting counties in developing Web. All but twenty-two counties in Nebraska now have Web sites. A number of additional counties are expected to develop Web sites within the next year.
- The Public Service Commission's Nebraska Internet Enhancement fund will provide assistance to communities, in partnership with telecommunications providers, to enhance advanced telecommunications services.
- Introductory computer and Internet training are offered by many entities including community colleges, the University of Nebraska's Communities of the Future Team, and public libraries.
- Public libraries also play an important role in providing public access to computers and the Internet. The Nebraska Library Commission maintains a database of public access sites in Nebraska available at [http://www.nol.org/home/CIO/public\\_access/](http://www.nol.org/home/CIO/public_access/).
- The Nebraska Hospital Association is heading up an effort to develop a statewide telehealth network, which will connect all hospitals in Nebraska. Other partners in this effort include the University of Nebraska, the Nebraska Division of Communications, the Nebraska Health and Human Services System, the Office of the Chief Information Officer and the Nebraska Information Technology Commission, Nebraska hospitals, and the Nebraska Public Service Commission.

## **Future**

Technology-related development is a continuous process, with significant progress being made. In the vision for the future, Nebraska communities will make even more effective use information technology, as evidenced by the following indicators:

- The number of cities and counties providing electronic access to information and services will increase.
- The number of communities developing local technology plans will increase.
- The number of businesses using e-commerce in Nebraska will increase.
- The number of households using the Internet will increase.

- The number of households and businesses subscribing to broadband Internet access will increase.
- All Nebraska hospitals will be connected through a statewide telehealth network.

## Recommended Actions

*(NOTE: These recommendations are still subject to change, pending additional advice from those entities that are participating in this strategic initiative.)*

- **Support community IT development by working with the University of Nebraska and other Technologies Across Nebraska Partners.**  
Actions include:
  1. Work with at least 6 community or regional technology committees to develop IT plans through the IT Planning and Mini Grant program
    - a. Lead Entity: Technologies Across Nebraska
    - b. Timeframe: September 1, 2004- September 1, 2005
    - c. Funding: \$20,000 from the NITC Community Technology Fund
  2. Provide continuing support for the 17 community and regional technology committees which have participated in the 2002-2003 and 2003-2004 IT Planning and Mini Grant programs.
    - a. Lead Entity: Technologies Across Nebraska
    - b. Timeframe: ongoing
    - c. Funding: No funding required for this task.
  3. Promote technology-related development through the quarterly newsletter, TANGents.
    - a. Lead Entity: Technologies Across Nebraska
    - b. Timeframe: fall 2004, winter 2005, spring 2005, summer 2005
    - c. Funding: No funding required for this task.
  4. Work with the Nebraska Rural Initiative to identify options for the expanded use of youth to assist in IT development activities.
    - a. Lead Entity: Technologies Across Nebraska and Nebraska Rural Initiative
    - b. Timeframe: January 31, 2005
    - c. Funding: No funding required for this task.
- **Strengthen efforts to coordinate technology-related development programs and to better incorporate technology-related development into traditional economic development efforts.** Technology-related development is just one component of a successful economic development plan. Initial efforts in this area will focus on e-commerce training coordination.  
Actions include:
  1. Complete an inventory of e-commerce training programs, gap analysis and recommendations for coordinating e-commerce training.

- a. Lead Entity: Nebraska Information Technology Commission, Nebraska Rural Development Commission, and Nebraska Rural Initiative
  - b. Timeframe: November 1, 2004
- 2. Develop a handout with tips for choosing a Web designer.
  - a. Lead Entity: University of Nebraska Rural Initiative and University of Nebraska Cooperative Extension
  - b. Timeframe: November 1, 2004
- 3. Develop an implementation plan for e-commerce coordination.
  - a. Lead Entity: Nebraska Information Technology Commission, Nebraska Rural Development Commission, and Nebraska Rural Initiative
  - b. Timeframe: February 1, 2005
- **Reinstate funding for the Nebraska Information Technology Commission's Community Technology Fund.** If fully funded, the Community Technology Fund would provide \$200,000 in funding for community technology projects.